<u>REMARKS</u>

The present application has been reviewed in light of the Office Action dated February 26, 2009. Claims 1, 2, 4-18 are presented for examination, of which Claims 1 and 10-18 are in independent form. Claim 3 has been cancelled, without prejudice or disclaimer of the subject matter presented therein. Claims 1 and 10-18 have been amended to define Applicant's invention still more clearly. Favorable reconsideration is requested.

Claims 1-18 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

It is respectfully submitted that support for the feature of discarding without encoding is provided in the application as originally filed, at least by item 324 of Fig. 3B, described at page 19, lines 10-13. From Fig. 3B and the corresponding description, if the scan is not active, then it will not be entropy encoded in the following step 326.

For these reasons, the rejection is respectfully traversed, and withdrawal of the Section 112 rejection is respectfully requested.

Claims 1-10, 12, 13, 15, 16, and 18 were rejected under 35 U.S.C. 103(a), as being obvious over the publication by Lee, entitled "JPEG 2000 Part I Final Committee Draft Version 1.0" (hereinafter "Lee"), in view of U.S. Patent Application Pub. No. 2002-0131084 (Andrew).

Independent Claim 1 relates to a method of compressing image data into a fixed size memory, the image data being encoded using a discrete cosine transformation and arranged into a plurality of scans of bitstream data, the plurality of scans being ordered from a perceptually most significant scan to a perceptually least significant scan. The method comprises determining whether the scans are a DC most significant scan or not,

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and determining whether the scans are active or inactive based on an attribute associated with each of the scans, the attribute being separate from the scan and identifying whether the scan is either active or inactive. The active scan is to be encoded and the inactive scan is not to be encoded. The method also includes encoding, if the scans are a DC most significant scan, the determined active scans of bitstream data encoded using the discrete cosine transformation and discarding the determined inactive scans without encoding the inactive scans, transferring the encoded scan bitstream data to the fixed size memory, and setting, if the fixed size memory becomes full, the attribute of a currently least significant scan of the active scans to inactive.

Support for at least some of the amendments to Claim 1 is found in Fig. 1A at item 104, which is described on page 11, line 27 to page 12, line 1 of the specification. A DC most significant scan is described at page 17, line 11, for example.

Lee relates to a JPEG 2000 standard for encoding. Page 3 of the Office Action states: "active = P101 Table D-9, AC, raw. inactive=terminate."

However, it is respectfully submitted that the Office Action's mis-interprets the word "terminate" as used by Lee. As used by Lee, "terminate" indicates the completing of the coding pass or code block. This can be seen in section D.4.1, as well as from section D.6 on page 101, which states that, after each magnitude refinement pass the bitstream has been "terminated" by padding to the byte boundary. The cleanup coding passes continue to receive data directly from the arithmetic coder and are always terminated.

As a consequence, "terminate" as used in Lee has nothing to do with whether the scan is active or inactive, as set forth in Claim 1.

This position is further supported by page 4 of the Office Action, which quotes Lee as stating on page 99, that "COD or COC marker signals which termination pattern is used...." Accordingly, the Office Action appears to contradict itself in that it offers an inconsistent interpretation of "terminate" as used in Lee.

Further, the terminate flag is not used in Table D.9 or D.8 to decide if the information is to be encoded or not. Table D.8 shows examples of arithmetic coder termination patterns. As mentioned above, termination details how the coding pass or code block is terminated. At no point is the information "discarded", as required by the encoding step of Claim 1. Instead, in Lee, all of the passes in Table D.8 are encoded. Table D.9 has a column listed as "coding operation", and here, there are two types of encoding, namely, AC or raw. Again, some of these encoding types are listed as having "termination", but the termination does not select which coding operation is used.

As a consequence, and as will be clearly appreciated from this point, Table D.9 and "terminate" as used in that table, do not teach or suggest the limitations of the "encoding" step of Claim 1. In fact, Lee teaches away from the subject matter of Claim 1 since the "terminate" operation is used by Lee as a result, and not as a means for selection of a type of coding operation, as required by Claim 1.

Andrew is cited against Claim 1 as teaching transferring and setting. However, Andrew is not seen to remedy the above-noted deficiencies of Lee as a reference against Claim 1. Neither is either reference seen to teach or suggest determining whether the scans are a DC most significant scan or not. (This subject matter is supported by the specification as originally filed, at least at page 19, lines 4-14, and Fig. 3B at step 322.).

Accordingly, Applicants submit that Claim 1 is clearly patentable over Lee and Andrew, whether considered separately or in combination, and respectfully request withdrawal of the rejection under 35 U.S.C. § 103(a).

Independent Claim 14 is directed to an apparatus for storing coded image data of an image in a storage of fixed memory size, wherein the image comprises a plurality of pixels. The apparatus comprises means for arranging the image into a plurality of bands each comprising a predetermined number N of consecutive lines of pixels, and means for buffering and processing the bands one by one in turn. The processing means comprises means for arranging a currently buffered band into a plurality of blocks of pixels of size MxM, wherein M is equal to said predetermined number N, and means for transforming the blocks of pixels using a discrete cosine transformation to produce respective blocks of transform coefficients. The apparatus also comprises means for partitioning the blocks of transform coefficients into a plurality of partitions wherein each partition comprises data from each block of transform coefficients and at least one partition comprises data from at least one but not all bit-planes of each block of transform coefficients. The plurality of partitions comprise a perceptually significant partition and a perceptually insignificant partition and partitions of varying perceptual significance there between, and each of the partitions have associated therewith a corresponding attribute separate from the partition and identifying whether the partition is active or inactive. The active partition is to be encoded and the inactive partition is not to be encoded. The apparatus also comprises means for entropy coding, if the partitions are a perceptually significant partition, each active partition of the blocks of transform coefficients and discarding each inactive partition without encoding the inactive partitions, and means for storing the entropy coded

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partitions in the storage of fixed memory size, wherein during the storing of the entropy coded partitions, if it is determined that the storage is full a coded least perceptually significant partition currently stored in the storage is overwritten by data from a coded more perceptually significant partition, and the attribute of the overwritten perceptually least significant partition is set to inactive.

Support for the recitations relating to a perceptually significant partition is found in the specification as originally filed, at least at, e.g., page 17, line 11.

For the reasons given above, it is respectfully submitted that neither Lee nor Andrew teaches or suggests the above recitations relating to encoding, and that Claim 14 therefore is clearly patentable over those references, whether considered separately or in combination.

The remaining independent claims recite features similar in many relevant respects to those of one or another of the independent claims discussed above, and also are believed to be clearly patentable over Lee and Andrew, whether considered separately or in combination, for the same reasons as are those independent claims.

The other rejected claims in this application depend from one or another of the independent claims discussed above and, therefore, are submitted to be patentable over those references for at least the same reasons. Since each dependent claim is also deemed to define an additional aspect of the invention, individual reconsideration of the patentability of each claim on its own merits is respectfully requested.

This Amendment After Final Action is believed clearly to place the present application in condition for allowance. Therefore, entry of this Amendment under 37 C.F.R. § 1.116 is believed proper and is respectfully requested, as an earnest effort to
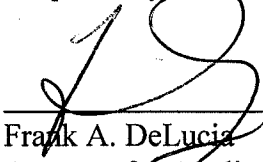
advance prosecution and reduce the number of issues. Should the Examiner believe that issues remain outstanding, it is respectfully requested that the Examiner contact Applicant's undersigned attorney in an effort to resolve such issues and advance the case to issue.

In view of the foregoing amendments and remarks, Applicant respectfully requests favorable reconsideration and early passage to issue of the present application.

No petition to extend the time for response to the Office Action is deemed necessary for this Amendment. If, however, such a petition is required to make this Amendment timely filed, then this paper should be considered such a petition and the Commissioner is authorized to charge the requisite petition fee to Deposit Account 50-3939.

Applicant's undersigned attorney may be reached in our New York Office by telephone at (212) 218-2100. All correspondence should continue to be directed to our address listed below.

Respectfully submitted,

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